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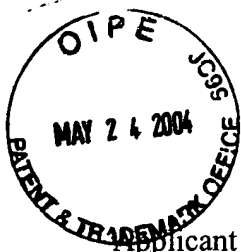
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Attorney's Docket No.: 14897-097001 / H1-107PCT1-US

1653\$
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Ota et al.
Serial No. : 10/058,518
Filed : January 28, 2002
Title : NOVEL GENES ASSOCIATED WITH THE MAINTENANCE OF
DIFFERENTIATION OF SMOOTH MUSCLE CELLS

Art Unit : 1653
Examiner : Sheridan K. Snedden

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

REQUEST TO CORRECT INVENTORSHIP UNDER 37 C.F.R. §1.48(a)

The above-captioned application was filed naming TOSHIO OTA, TAKAO ISOGAI, TETSUO NISHIKAWA, KOJI HAYASHI, KAORU OTSUKA, JUN-ICHI YAMAMOTO, SHIZUKO ISHII, TOMOYASU SUGIYAMA, AI WAKAMATSU, KEIICHI NAGAI, TETSUJI OTSUKI, SHIN-ICHI FUNAHASHI, and SHOJI MIYATA as inventors.

Subsequently, it was discovered that two additional inventors, KENJI SOBUE and KENICHIRO HAYASHI, were omitted without any deceptive intention. Accordingly, Applicants respectfully request that KENJI SOBUE and KENICHIRO HAYASHI be added as co-inventors for this application.

A declaration satisfying 37 C.F.R. §1.68 has previously been submitted in this application. Therefore, pursuant to 37 C.F.R. §1.48(a), the following documents are attached herewith to correct inventorship:

1. Statement from KENJI SOBUE that the error in inventorship occurred without deceptive intention on his part;

05/25/2004 HTECKLU1 00000032 10058518

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130.00 OP

CERTIFICATE OF MAILING BY FIRST CLASS MAIL

I hereby certify under 37 CFR §1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

May 20, 2004

Date of Deposit

Melissa Alexander
Signature

Melissa Alexander

Typed or Printed Name of Person Signing Certificate

Applicant : Ota et al.
Serial No. : 10/058,518
Filed : January 28, 2002
Page : 2 of 2

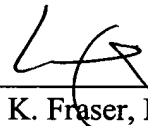
Attorney's Docket No.: 14897-097001 / H1-107PCT1-US

2. Statement from KENICHIRO HAYASHI that the error in inventorship occurred without deceptive intention on his part;
3. A Combined Declaration and Power of Attorney executed by all inventors;
4. The processing fee of \$130.00 as set forth in 37 C.F.R. 1.17(i); and
5. Consent of the assignee to correct inventorship.

Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

Date: May 20, 2004

 Reg. No. 44,164
for Janis K. Fraser, Ph.D., J.D.
Reg. No. 34,819

Fish & Richardson P.C.
225 Franklin Street
Boston, MA 02110-2804
Telephone: (617) 542-5070
Facsimile: (617) 542-8906

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Attorney's Docket No.: 14897-097001 / H1-107PCT1-US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Toshio Ota et al.

Art Unit : 1653

Serial No. : 10/058,518

Examiner : Sheridan K. Snedden

Filed : January 28, 2002

Title : NOVEL GENES ASSOCIATED WITH THE MAINTENANCE OF
DIFFERENTIATION OF SMOOTH MUSCLE CELLS

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

PETITION TO CORRECT INVENTORSHIP
INVENTOR'S DECLARATION

KENJI SOBUE hereby declares:

1. That he is an inventor of the noted patent application.

2. That through error, without any deceptive intention on his part, the above-captioned application was filed naming TOSHIO OTA, TAKAO ISOGAI, TETSUO NISHIKAWA, KOJI HAYASHI, KAORU OTSUKA, JUN-ICHI YAMAMOTO, SHIZUKO ISHII, TOMOYASU SUGIYAMA, AI WAKAMATSU, KEIICHI NAGAI, TETSUJI OTSUKI, SHIN-ICHI FUNAHASHI, and SHOJI MIYATA, rather than TOSHIO OTA, TAKAO ISOGAI, TETSUO NISHIKAWA, KOJI HAYASHI, KAORU OTSUKA, JUN-ICHI YAMAMOTO, SHIZUKO ISHII, TOMOYASU SUGIYAMA, AI WAKAMATSU, KEIICHI NAGAI, TETSUJI OTSUKI, SHIN-ICHI FUNAHASHI, SHOJI MIYATA, KENJI SOBUE, and KENICHIRO HAYASHI. This error was discovered after the application was filed.

3. That all statements made herein of his own knowledge are true and that all statements made on information and belief are believed to be true and further that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States

CERTIFICATE OF MAILING BY FIRST CLASS MAIL

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5-20-2004
Date of Deposit

Melissa Alexander
Signature

MELISSA ALEXANDER
Typed or Printed Name of Person Signing Certificate

Applicant : Toshio Ota et al.
Serial No. : 10/058,518
Filed : January 28, 2002
Page : 2 of 2

Attorney's Docket No.: 14897-097001 / H1-107PCT1-
US

Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: April 27, 2004

Kenji Sobue
KENJI SOBUE
4-4, Togu-cho
Ibaraki-shi
Osaka, 567-0812
JAPAN

Fish & Richardson P.C.
225 Franklin Street
Boston, MA 02110-2804
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Attorney's Docket No.: 14897-097001 / H1-107PCT1-US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Toshio Ota et al.

Art Unit : 1653

Serial No. : 10/058,518

Examiner : Sheridan K. Snedden

Filed : January 28, 2002

Title : NOVEL GENES ASSOCIATED WITH THE MAINTENANCE OF DIFFERENTIATION OF SMOOTH MUSCLE CELLS

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

PETITION TO CORRECT INVENTORSHIP
INVENTOR'S DECLARATION

KENICHIRO HAYASHI hereby declares:

1. That he is an inventor of the noted patent application.
2. That through error, without any deceptive intention on his part, the above-

captioned application was filed naming TOSHIO OTA, TAKAO ISOGAI, TETSUO NISHIKAWA, KOJI HAYASHI, KAORU OTSUKA, JUN-ICHI YAMAMOTO, SHIZUKO ISHII, TOMOYASU SUGIYAMA, AI WAKAMATSU, KEIICHI NAGAI, TETSUJI OTSUKI, SHIN-ICHI FUNAHASHI, and SHOJI MIYATA, rather than TOSHIO OTA, TAKAO ISOGAI, TETSUO NISHIKAWA, KOJI HAYASHI, KAORU OTSUKA, JUN-ICHI YAMAMOTO, SHIZUKO ISHII, TOMOYASU SUGIYAMA, AI WAKAMATSU, KEIICHI NAGAI, TETSUJI OTSUKI, SHIN-ICHI FUNAHASHI, SHOJI MIYATA, KENJI SOBUE, and KENICHIRO HAYASHI. This error was discovered after the application was filed.

3. That all statements made herein of his own knowledge are true and that all statements made on information and belief are believed to be true and further that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States

CERTIFICATE OF MAILING BY FIRST CLASS MAIL

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Date of Deposit _____

Signature _____

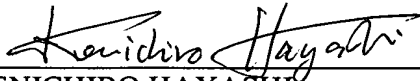
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Applicant : Toshio Ota et al.
Serial No. : 10/058,518
Filed : January 28, 2002
Page : 2 of 2

Attorney's Docket No.: 14897-097001 / H1-107PCT1-
US

Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: 27 April, 2008


KENICHIRO HAYASHI
8-2-901, Minase 2-chome
Shimamoto-cho, Mishima-gun
Osaka, 618-0014
JAPAN

Fish & Richardson P.C.
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Facsimile: (617) 542-8906

20792465.doc



Attorney's Docket No.: 14897-097001
Client's Ref. No.: H1-107PCT1-US

COMBINED DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled NOVEL GENES ASSOCIATED WITH THE MAINTENANCE OF DIFFERENTIATION OF SMOOTH MUSCLE CELLS, the specification of which:

- ☐ is attached hereto.
☒ was filed on January 28, 2002 as Application Serial No. 10/058,518 and was amended on _____.
☐ was described and claimed in PCT International Application No. _____ filed on _____ and as amended under PCT Article 19 on _____.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose all information I know to be material to patentability in accordance with Title 37, Code of Federal Regulations, §1.56.

I hereby claim the benefit under Title 35, United States Code, §119(e)(1) of any United States provisional application(s) listed below:

U.S. Serial No.	Filing Date	Status
60/159,590	October 18, 1999	Abandoned
60/183,322	February 17, 2000	Abandoned

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose all information I know to be material to patentability as defined in Title 37, Code of Federal Regulations, §1.56(a) which became available between the filing date of the prior application and the national or PCT international filing date of this application:

U.S. Serial No.	Filing Date	Status
PCT/JP00/05059	July 28, 2000	Pending

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate or of any PCT international application(s) designating at least one country other than the United States of America listed below and have also identified below any foreign application for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application(s) of which priority is claimed:

Country	Application No.	Filing Date	Priority Claimed
Japan	11-248036	July 29, 1999	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Japan	2000-118776	January 11, 2000	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Japan	2000-183767	May 2, 2000	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Combined Declaration and Power of Attorney

Page 2 of 5 Pages

I hereby appoint the following attorneys and/or agents to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

Janis K. Fraser, Ph.D., J.D., Reg. No. 34,819
Timothy A. French, Reg. No. 30,175
J. Peter Fasse, Reg. No. 32,983
Andrew W. Torrance, Ph.D., J.D., Reg. No. 51,108

John W. Freeman, Reg. No. 29,066
Harold H. Fox, Reg. No. 41,498
Anita L. Meiklejohn, Reg. No. 35,283

Direct all telephone calls to ANDREW W. TORRANCE, PH.D., J.D. at telephone number (617) 542-5070.

Direct all correspondence to the following:

26161
PTO Customer Number

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patents issued thereon.

Full Name of Inventor: TOSHIO OTA

Inventor's Signature: Toshio Ota Date: April 7, 2004
Residence Address: Tokyo, Japan
Citizenship: Japan
Post Office Address: c/o Kyowa Hakko Kogyo Co., Ltd.
Tokyo Research Laboratories, 3-6-6, Asahi-machi, Machida-shi, Tokyo, 194-8533
Japan

Full Name of Inventor: TAKAO ISOGAI

Inventor's Signature: Takao Isogai Date: January 26, 2004
Residence Address: Ibaraki, Japan
Citizenship: Japan
Post Office Address: 511-12, Omuro, Arimi-machi, Inashiki-gun, Ibaraki 300-0303 Japan

Combined Declaration and Power of Attorney
Page 3 of 5 Pages

Full Name of Inventor: TETSUO NISHIKAWA

Inventor's Signature: Tetsuo Nishikawa Date: Jan. 26, 2004
Residence Address: Tokyo, Japan
Citizenship: Japan
Post Office Address: 27-3-403, Hikawa-cho, Itabashi-ku, Tokyo, 173-0013
Japan

Full Name of Inventor: KOJI HAYASHI

Inventor's Signature: Koji Hayashi Date: March. 24, 2004
Residence Address: Osaka, Japan
Citizenship: Japan
Post Office Address: 2-10-2-2-236, Sone-Higashi-machi, Toyonaka-shi, Osaka, 561-0802
Japan

Full Name of Inventor: KAORU OTSUKA

Inventor's Signature: Kaoru Otsuka Date: Feb. 10, 2004
Residence Address: Saitama, Japan
Citizenship: Japan
Post Office Address: 2-8-6-A101, Maehara, Honjyou-shi, Saitama, 367-0047
Japan

Full Name of Inventor: JUN-ICHI YAMAMOTO

Inventor's Signature: Junichi Yamamoto Date: Jan. 26, 2004
Residence Address: Chiba, Japan
Citizenship: Japan
Post Office Address: 3-28-3-A101, Kiyomidaihigashi, Kisarazu-shi, Chiba, 292-0041,
Japan

Full Name of Inventor: SHIZUKO ISHII

Inventor's Signature: Shizuko Ishii Date: Jan. 23, 2004
Residence Address: Chiba, Japan
Citizenship: Japan
Post Office Address: 4508-19-202, Yana, Kisarazu-shi, Chiba, 292-0812
Japan

Combined Declaration and Power of Attorney

Page 4 of 5 Pages

Full Name of Inventor: TOMOYASU SUGIYAMA

Inventor's Signature:

Residence Address:

Citizenship:

Post Office Address:

Tokyo, Japan

Japan

5-4-3-512, Yokokawa, Sumida-ku, Tokyo, 130-0003
Japan

Date:

March 30, 2004

Full Name of Inventor: AI WAKAMATSU

Inventor's Signature:

Residence Address:

Citizenship:

Post Office Address:

Chiba, Japan

Japan

1473-4-202, Takayanagi, Kisarazu-shi, Chiba, 292-0014
Japan

Date:

January 26, 2004

Full Name of Inventor: KEIICHI NAGAI

Inventor's Signature:

Residence Address:

Citizenship:

Post Office Address:

Tokyo, Japan

Japan

3-44-14-9-204, Sakuragaoka, Higashiyamato-shi, Tokyo, 207-0022
Japan

Date:

February 20, 2004

Full Name of Inventor: TETSUJI OTSUKI

Inventor's Signature:

Residence Address:

Citizenship:

Post Office Address:

Chiba, Japan

Japan

3-1-10-B102, Asahi, Kisarazu-shi, Chiba, 292-0055
Japan

Date:

February 9, 2004

Combined Declaration and Power of Attorney

Page 5 of 5 Pages

Full Name of Inventor: SHIN-ICHI FUNAHASHI

Inventor's Signature: Shinichi Funahashi Date: Feb. 17, 2004

Residence Address: Ibaraki, Japan

Citizenship: Japan

Post Office Address: c/o Chugai Seiyaku Kabushiki Kaisha, 153-2, Nagai, Niihari-mura, Niihari-gun,
Ibaraki, 300-4101
Japan

Full Name of Inventor: SHOJI MIYATA

Inventor's Signature: Shoji Miyata Date: March. 20, 2004

Residence Address: Kanagawa, Japan

Citizenship: Japan

Post Office Address: 1975, Takada-cho, Kouhoku-ku, Yokohama-shi, Kanagawa, 223-0063
Japan

Full Name of Inventor: KENJI SOBUE

Inventor's Signature: Kenji Sobue Date: April 27, 2004

Residence Address: Osaka, Japan

Citizenship: Japan

Post Office Address: 4-4, Togu-cho, Ibaraki-shi, Osaka, 567-0812
Japan

Full Name of Inventor: KENICHIRO HAYASHI

Inventor's Signature: Kenichiro Hayashi Date: April 27, 2004

Residence Address: Osaka, Japan

Citizenship: Japan

Post Office Address: 8-2-901, Minase 2-chome, Shimamoto-cho, Mishima-gun, Osaka, 618-0014
Japan



Attorney's Docket No.: 14897-097001 / H1-107PCT1-US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Toshio Ota et al. Art Unit : 1653
Serial No. : 10/058,518 Examiner : Sheridan K. Snedden
Filed : January 28, 2002
Title : NOVEL GENES ASSOCIATED WITH THE MAINTENANCE OF
DIFFERENTIATION OF SMOOTH MUSCLE CELLS

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

ASSIGNEE CONSENT TO AMEND INVENTORSHIP IN ACCORDANCE WITH TITLE 37,
CODE OF FEDERAL REGULATIONS, §1.48(a)(5)

The undersigned (whose title is supplied below) is empowered to act on behalf of Chugai Seiyaku Kabushiki Kaisha, a Japanese corporation having a place of business at 5-1, Ukima 5-chome, Kita-ku, Tokyo, 115-8543, Japan, the Assignee for the above captioned patent application by virtue of assignments recorded at Reel 013557, Frame 0172, and Reel 013562, Frame 0342, and Reel 014095, Frame 0751, copies of which are hereto attached. The Assignee hereby assents to the addition of KENJI SOBUE and KENICHIRO HAYASHI as joint inventors of the above captioned patent application with TOSHIO OTA, TAKAO ISOGAI, TETSUO NISHIKAWA, KOJI HAYASHI, KAORU OTSUKA, JUN-ICHI YAMAMOTO, SHIZUKO ISHII, TOMOYASU SUGIYAMA, AI WAKAMATSU, KEIICHI NAGAI, TETSUJI OTSUKI, SHIN-ICHI FUNAHASHI, and SHOJI MIYATA.

The undersigned has reviewed all the documents in the chain of title of the above captioned patent application and to the best of the undersigned's knowledge and belief, title is in the Assignee.

The undersigned hereby declares that all statements made herein of the undersigned's own knowledge are true and that all statements made on information and belief are believed to be

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Melissa Alexander
Signature

MELISSA ALEXANDER
Typed or Printed Name of Person Signing Certificate

Applicant : Toshio Ota et al.
Serial No. : 10/058,518
Filed : January 28, 2002
Page : 2 of 2

Attorney's Docket No.: 14897-097001 / H1-107PCT1-
US

true; and further that these statements were made with the knowledge that willful statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the patent application of any patent issued thereon.

CHUGAI SEIYAKU KABUSHIKI KAISHA

By: Masao Haruna

Masao Haruna

Title: Director

Intellectual Property Department

Date: 27. April, 2004

Fish & Richardson P.C.
225 Franklin Street
Boston, MA 02110-2804
Telephone: (617) 542-5070
Facsimile: (617) 542-8906



UNITED STATES
PATENT AND
TRADEMARK OFFICE



14897/097001

APRIL 10, 2003

FISH & RICHARDSON P.C.
JANIS K. FRASER, PH.D., J.D.
225 FRANKLIN STREET
BOSTON, MA 02110-2804

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PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 12/09/2002

REEL/FRAME: 013557/0172
NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:
FUNAHASHI, SHIN-ICHI

DOC DATE: 05/13/2002

ASSIGNOR:
MIYATA, SHOJI

DOC DATE: 05/13/2002

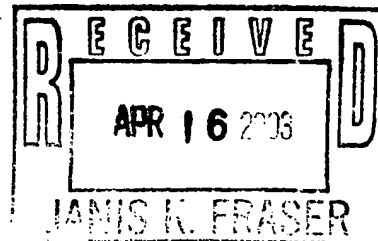
ASSIGNEE:
CHUGAI SEIYAKU KABUSHIKI KAISHA
5-1, UKIMA 5-CHOME, KITA-KU
TOKYO, JAPAN 115-8543

SERIAL NUMBER: 10058518
PATENT NUMBER:

FILING DATE: 01/28/2002
ISSUE DATE:

JEEVON JONES, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

* No Docketing Required *	
Reviewed By	Practice Systems
Initials:	JMF
Reviewed By	Billing
Initials:	





Substitute Form PTO-1595
Attorney Docket No.: 06501-097001
Client's Ref. No.: H1-107PCT1-US

RECORDATION FORM COVER SHEET PATENTS ONLY

Commissioner for Patents: Please record the attached original document(s) or copy(ies).	
1. Name of conveying party(ies): Shin-ichi Funahashi and Shoji Miyata Additional name(s) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2. Name and address of receiving party(ies): Chugal Seiyaku Kabushiki Kaisha 5-1, Ukima 5-chome, Kita-ku Tokyo 115-8543 Japan Additional names/addresses attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
3. Nature of conveyance: <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input type="checkbox"/> Other: Execution Date: 05/13/02	
4. Application number(s) or patent number(s): If this document is being filed with a new application, the execution date of the application is: A. Patent Application No(s): 10/058,518 B: Patent No(s): Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Name/address of party to whom correspondence concerning document should be mailed: JANIS K. FRASER, PH.D., J.D. Fish & Richardson P.C. 225 Franklin Street Boston, Massachusetts 02110-2804	6. Total number of applications/patents involved: 1 7. Total fee (37 CFR \$3.41): \$40 <input checked="" type="checkbox"/> Enclosed <input type="checkbox"/> Authorized to charge Deposit Account. 8. Deposit Account No.: 06-1050 Please apply any additional charges, or any credits, to our Deposit Account No. 06-1050.
DO NOT USE THIS SPACE	
9. Statement and Signature: <i>To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.</i>	
Andrew W. Torrance, Ph.D., J.D. Reg. No. 51,108 Name of Person Signing	 Signature December 3, 2002 Date
Total number of pages including coversheet, attachments and document: 3	

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I hereby certify under 37 CFR §1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and is addressed to the Commissioner of Patents, Washington, D.C. 20231.

December 3, 2002
Date of Deposit

Signature

Toni M. Sousa
Typed Name of Person Signing Certificate

ASSIGNMENT

For valuable consideration, we, SHIN-ICHI FUNAHASHI of Ibaraki, JAPAN, and SHOJI MIYATA of Kanagawa, JAPAN, hereby assign to:

Chugai Seiyaku Kabushiki Kaisha, a Japanese corporation having a place of business at:

5-1, Ukima 5-chome, Kita-ku
Tokyo 115-8543 Japan; and

its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest throughout the world in the inventions and improvements which are subject of an application for United States Patent signed by us, entitled NOVEL GENES ASSOCIATED WITH THE MAINTENANCE OF DIFFERENTIATION OF SMOOTH MUSCLE CELLS, filed January 28, 2002, and assigned U.S. Serial Number 10/058,518, and we authorize and request the attorneys appointed in said application to hereafter complete this assignment by inserting above the filing date and serial number of said application when known; this assignment including said application, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and we authorize the Assignee to apply in all countries in our name or in its own name for patents, utility models, design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements; and we agree for ourselves and our respective heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this assignment.

IN WITNESS WHEREOF, I hereto set my hand and seal at Ibaraki, JAPAN
this 13th day of May, 2002
Shin-ichi Funahashi L.S.
SHIN-ICHI FUNAHASHI

Witnessed by: Tetsuro Orita
Name: Tetsuro Orita Date: May 13, 2002

Witnessed by: Motooki Ashihara
Name: Motooki Ashihara Date: May 13, 2002

IN WITNESS WHEREOF, I hereto set my hand and seal at Kanagawa, JAPAN
this 13th day of May, 2002
Shoji Miyata L.S.
SHOJI MIYATA

Witnessed by: Keiichi Tanaka
Name: KOUICHI TANAKA Date: May 13, 2002

Witnessed by: Kumiko Shigano
Name: KUMIKO SHIGANO Date: May 13, 2002



UNITED STATES
PATENT AND
TRADEMARK OFFICE



JKF
Arin
Ant
14897-097001

APRIL 14, 2003

FISH & RICHARDSON P.C.
JANIS K. FRASER, PH.D., J.D.
225 FRANKLIN STREET
BOSTON, MA 02110-2804

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APR 18 2003

FISH & RICHARDSON, P.C.
BOSTON OFFICE

Under Secretary of Commerce For Intellectual Property and
Director of the United States Patent and Trademark Office
Washington, DC 20231
www.uspto.gov



102311020A

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 12/09/2002

REEL/FRAME: 013562/0342
NUMBER OF PAGES: 13

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

OTA, TOSHIO

DOC DATE: 06/10/2002

ASSIGNOR:

ISOGAI, TAKAO

DOC DATE: 06/11/2002

ASSIGNOR:

NISHIKAWA, TETSUO

DOC DATE: 06/11/2002

ASSIGNOR:

HAYASHI, KOJI

DOC DATE: 05/30/2002

ASSIGNOR:

OTSUKA, KAORU

DOC DATE: 05/31/2002

ASSIGNOR:

YAMAMOTO, JUN-ICHI

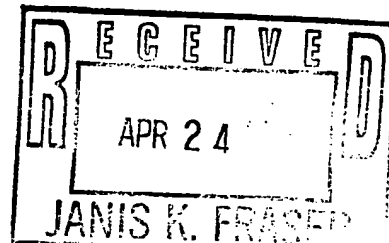
DOC DATE: 06/10/2002

ASSIGNOR:

ISHII, SHIZUKO

DOC DATE: 06/10/2002

* No Docketing Required	
Reviewed By Practice Systems	Initials: JMC
Reviewed By Billing Secretary	Initials:



013562/0342 PAGE 2

ASSIGNOR:
SUGIYAMA, TOMOYASU

DOC DATE: 05/28/2002

ASSIGNOR:
WAKAMATSU, AI

DOC DATE: 06/10/2002

ASSIGNOR:
NAGAI, KEIICHI

DOC DATE: 05/04/2002

ASSIGNOR:
OTSUKI, TETSUJI

DOC DATE: 05/29/2002

ASSIGNEE:
HELIX RESEARCH INSTITUTE
1532-3, YANA, KISARAZU-SHI
CHIBA 292-0812, JAPAN

SERIAL NUMBER: 10058518
PATENT NUMBER:

FILING DATE: 01/28/2002
ISSUE DATE:

TARA WASHINGTON, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS



Substitute Form PTO-1595
Attorney Docket No.: 06501-097001
Client's Ref. No.: H1-107PCT1-US

RECORDATION FORM COVER SHEET PATENTS ONLY

Commissioner for Patents: Please record the attached original document(s) or copy(ies).	
1. Name of conveying party(ies): Toshio Ota, Takao Isogai, Tetsuo Nishikawa, Koji Hayashi, Kaoru Otsuka, Jun-ichi Yamamoto, Shizuko Ishii, Tomoyasu Sugiyama, Ai Wakamatsu, Keiichi Nagai and Tetsuji Otsuki Additional name(s) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2. Name and address of receiving party(ies): Helix Research Institute 1532-3, Yana, Kisarazu-shi CHIBA 292-0812 JAPAN Additional names/addresses attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
3. Nature of conveyance: <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input type="checkbox"/> Other: Execution Date: 6/10/02; 6/11/02; 6/11/02; 5/30/02; 5/31/02; 6/10/02; 6/10/02; 5/28/02; 6/10/02; 5/4/02 and 5/29/02	
4. Application number(s) or patent number(s): If this document is being filed with a new application, the execution date of the application is: A. Patent Application No(s).: 10/058,518 B. Patent No(s).: Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Name/address of party to whom correspondence concerning document should be mailed: JANIS K. FRASER, PH.D., J.D. Fish & Richardson P.C. 225 Franklin Street Boston, Massachusetts 02110-2804	6. Total number of applications/patents involved: 1 7. Total fee (37 CFR §3.41): \$40 <input checked="" type="checkbox"/> Enclosed <input type="checkbox"/> Authorized to charge Deposit Account. 8. Deposit Account No.: 06-1050 Please apply any additional charges, or any credits, to our Deposit Account No. 06-1050.
DO NOT USE THIS SPACE	
9. Statement and Signature: <i>To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.</i> Andrew W. Torrance, Ph.D., J.D. Reg. No. 51,108 Name of Person Signing Signature: <u>Andrew W. Torrance</u> Date: <u>December 3, 2002</u>	
Total number of pages including coversheet, attachments and document: 13	

70035525.doc

CERTIFICATE OF MAILING BY FIRST CLASS MAIL

I hereby certify under 37 CFR §1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and is addressed to the Commissioner of Patents, Washington, D.C. 20231.

December 3, 2002
Date of Deposit

Signature

Toni M. Sousa
Typed Name of Person Signing Certificate

ASSIGNMENT

For valuable consideration, we, TOSHIO OTA of Tokyo, JAPAN, TAKAO ISOGAI of Ibaraki, JAPAN, TETSUO NISHIKAWA of Tokyo, JAPAN, KOJI HAYASHI of Osaka, JAPAN, KAORU OTSUKA of Saitama, JAPAN, JUN-ICHI YAMAMOTO of Chiba, JAPAN, SHIZUKO ISHII of Chiba, JAPAN, TOMOYASU SUGIYAMA of Tokyo, JAPAN, AI WAKAMATSU of Chiba, JAPAN, KEIICHI NAGAI of Tokyo, JAPAN, and TETSUJI OTSUKI of Chiba, JAPAN, hereby assign to:

Helix Research Institute, a Japanese corporation having a place of business at:

1532-3, Yana, Kisarazu-shi
CHIBA 292-0812 JAPAN; and

its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest throughout the world in the inventions and improvements which are subject of an application for United States Patent signed by us, entitled NOVEL GENES ASSOCIATED WITH THE MAINTENANCE OF DIFFERENTIATION OF SMOOTH MUSCLE CELLS, filed January 28, 2002, and assigned U.S. Serial Number 10/058,518, and we authorize and request the attorneys appointed in said application to hereafter complete this assignment by inserting above the filing date and serial number of said application when known; this assignment including said application, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and we authorize the Assignee to apply in all countries in our name or in its own name for patents, utility models, design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements; and we agree for ourselves and our respective heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this assignment.

IN WITNESS WHEREOF, I hereto set my hand and seal at Tokyo, Japan,
this 10th day of June, 2002
Toshio Ota L.S.
TOSHIO OTA

Witnessed by: Kenji Nagahari
Name: Kenji Nagahari Date: Jun 10, 2002

Witnessed by: _____
Name: _____ Date: _____

IN WITNESS WHEREOF, I hereto set my hand and seal at _____,
this _____ day of _____, 2002

TAKAO ISOGAI L.S.

Witnessed by: _____
Name: _____ Date: _____

Witnessed by: _____
Name: _____ Date: _____

IN WITNESS WHEREOF, I hereto set my hand and seal at _____,
this _____ day of _____, 2002

TOSHIO OTA

L.S.

Witnessed by: _____

Name: _____ Date: _____

Witnessed by: _____

Name: _____ Date: _____

IN WITNESS WHEREOF, I hereto set my hand and seal at Chiba, Japan,
this 11th day of June, 2002

Takao Isogai
TAKAO ISOGAI

L.S.

Witnessed by: Kenji Nagahara

Name: Kenji Nagahara Date: June 11, 2002

Witnessed by: _____

Name: _____ Date: _____

IN WITNESS WHEREOF, I hereto set my hand and seal at Chiba, Japan,
this 11th day of June, 2002
Tetsuo Nishikawa L.S.
TETSUO NISHIKAWA

Witnessed by: Kenji Nagahari
Name: Kenji Nagahari Date: June 11, 2002

Witnessed by: _____
Name: _____ Date: _____

IN WITNESS WHEREOF, I hereto set my hand and seal at _____,
this _____ day of _____, 2002

KOJI HAYASHI L.S.

Witnessed by: _____
Name: _____ Date: _____

Witnessed by: _____
Name: _____ Date: _____

IN WITNESS WHEREOF, I hereto set my hand and seal at _____,
this _____ day of _____, 2002

TETSUO NISHIKAWA

L.S.

Witnessed by: _____

Name: _____ Date: _____

Witnessed by: _____

Name: _____ Date: _____

IN WITNESS WHEREOF, I hereto set my hand and seal at Osaka, JAPAN,
this 30th day of May, 2002

KOJI HAYASHI

Koji Hayashi

L.S.

Witnessed by: Kenji Nagahara

Name: Kenji Nagahara Date: May 30, 2002

Witnessed by: _____

Name: _____ Date: _____

IN WITNESS WHEREOF, I hereto set my hand and seal at Saitama, Japan,
this 31st day of May, 2002
Kaoru Otsuka L.S.
KAORU OTSUKA

Witnessed by: Kenji Nagahara
Name: Kenji Nagahara Date: May 31, 2002

Witnessed by: _____
Name: _____ Date: _____

IN WITNESS WHEREOF, I hereto set my hand and seal at _____,
this _____ day of _____, 2002
_____ L.S.
JUN-ICHI YAMAMOTO

Witnessed by: _____
Name: _____ Date: _____

Witnessed by: _____
Name: _____ Date: _____

IN WITNESS WHEREOF, I hereto set my hand and seal at _____,
this _____ day of _____, 2002

KAORU OTSUKA

L.S.

Witnessed by: _____

Name: _____ Date: _____

Witnessed by: _____

Name: _____ Date: _____

IN WITNESS WHEREOF, I hereto set my hand and seal at Chiba, Japan,
this 10th day of June, 2002

Junichi Yamamoto
JUN-ICHI YAMAMOTO

L.S.

Witnessed by: Kenji Nagahara

Name: Kenji Nagahara Date: June 10, 2002

Witnessed by: _____

Name: _____ Date: _____

IN WITNESS WHEREOF, I hereto set my hand and seal at chiba, Japan
this 10th day of June, 2002
Shizuko Ishii L.S.
SHIZUKO ISHII

Witnessed by: Kenji Nagahara
Name: Kenji Nagahara Date: June 10, 2002

Witnessed by: _____
Name: _____ Date: _____

IN WITNESS WHEREOF, I hereto set my hand and seal at _____
this _____ day of _____, 2002
_____ L.S.
TOMOYASU SUGIYAMA

Witnessed by: _____
Name: _____ Date: _____

Witnessed by: _____
Name: _____ Date: _____

IN WITNESS WHEREOF, I hereto set my hand and seal at _____,
this _____ day of _____, 2002

SHIZUKO ISHII

L.S.

Witnessed by: _____

Name: _____ Date: _____

Witnessed by: _____

Name: _____ Date: _____

IN WITNESS WHEREOF, I hereto set my hand and seal at Tokyo, JAPAN,
this 28th day of May, 2002

Tomoyasu Sugiyama
TOMOYASU SUGIYAMA

L.S.

Witnessed by: Kenji Nagahara

Name: Kenji Nagahara Date: May 28, 2002

Witnessed by: _____

Name: _____ Date: _____

IN WITNESS WHEREOF, I hereto set my hand and seal at Chiba, Japan,
this 10th day of June, 2002
Ai Wakamatsu L.S.
AI WAKAMATSU

Witnessed by: Kenji Nagahara
Name: Kenji Nagahara Date: June 10, 2002

Witnessed by: _____
Name: _____ Date: _____

IN WITNESS WHEREOF, I hereto set my hand and seal at _____,
this _____ day of _____, 2002

KEIICHI NAGAI L.S.

Witnessed by: _____
Name: _____ Date: _____

Witnessed by: _____
Name: _____ Date: _____

IN WITNESS WHEREOF, I hereto set my hand and seal at _____,
this _____ day of _____, 2002

AI WAKAMATSU

L.S.

Witnessed by: _____

Name: _____ Date: _____

Witnessed by: _____

Name: _____ Date: _____

IN WITNESS WHEREOF, I hereto set my hand and seal at Tokyo, Japan,
this 4th day of May, 2002

Keiichi Nagai
KEIICHI NAGAI

L.S.

Witnessed by: Kenji Nagahara

Name: Kenji Nagahara Date: May 4, 2002

Witnessed by: _____

Name: _____ Date: _____

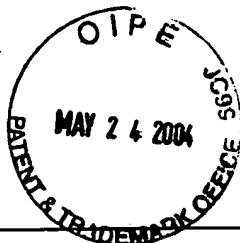
IN WITNESS WHEREOF, I hereto set my hand and seal at Saitama, Japan,
this 29th day of May, 2002
Tetsuji Otsuki L.S.
TETSUJI OTSUKI

Witnessed by: Kenji Nagahara
Name: Kenji Nagahara Date: May 29, 2002

Witnessed by: _____
Name: _____ Date: _____



UNITED STATES
PATENT AND
TRADEMARK OFFICE



141897-097001

NOVEMBER 03, 2003

PTAS

Chief Financial Officer and Chief Administrative Officer
Washington, DC 20231
www.uspto.gov

FISH & RICHARDSON
JANIS K. FRASER
225 FRANKLIN STREET
BOSTON, MA 02110-2804



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UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

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PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 05/23/2003

REEL/FRAME: 014095/0751
NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

HELIX RESEARCH INSTITUTE

DOC DATE: 11/11/2002

ASSIGNEE:

CHUGAI SEIYAKU KABUSHIKI KAISHA
5-1, UKIMA 5-CHOME, KITA-KU
TOKYO, JAPAN 115-8543

SERIAL NUMBER: 10058518
PATENT NUMBER:

FILING DATE: 01/28/2002
ISSUE DATE:

JEEVON JONES, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

* No Docketing Required *
Reviewed By Practice Systems
Initials: <u>CR</u>
Reviewed By Billing Secretary
Initials: _____

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NOV 07 2003

FISH & RICHARDSON, P.C.
BOSTON OFFICE



Substitute Form PTO-1595
Attorney Docket No.: 14897-097001
Client's Ref. No.: H1-107PCT1-US

RECORDATION FORM COVER SHEET PATENTS ONLY

Commissioner for Patents: Please record the attached original document(s) or copy(ies).	
1. Name of conveying party(ies): Helix Research Institute 1532-3, Yana, Kisarazu-shi CHIBA 292-0812 Japan Additional name(s) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2. Name and address of receiving party(ies): Chugai Seiyaku Kabushiki Kaisha 5-1, Ukima 5-chome, Kita-ku TOKYO 115-8543 Japan Additional names/addresses attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
3. Nature of conveyance: <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input type="checkbox"/> Other: Execution Date: 11/11/2002	
4. Application number(s) or patent number(s): If this document is being filed with a new application, the execution date of the application is: A. Patent Application No(s): 10/058,518 B. Patent No(s): Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Name/address of party to whom correspondence concerning document should be mailed: JANIS K. FRASER, PH.D., J.D. Fish & Richardson P.C. 225 Franklin Street Boston, Massachusetts 02110-2804	6. Total number of applications/patents involved: 1 7. Total fee (37 CFR §3.41): \$40 <input checked="" type="checkbox"/> Enclosed <input type="checkbox"/> Authorized to charge Deposit Account. 8. Deposit Account No.: 06-1050 Please apply any additional charges, or any credits, to our Deposit Account No. 06-1050.
DO NOT USE THIS SPACE	
9. Statement and Signature: <i>To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.</i> Andrew W. Torrance, Ph.D., J.D. Reg. No. 51,108 Name of Person Signing Signature: <u>Andrew W. Torrance</u> Date: <u>May 21, 2003</u>	
Total number of pages including coversheet, attachments and document: 3	

30147827.doc

CERTIFICATE OF MAILING BY FIRST CLASS MAIL

I hereby certify under 37 CFR §1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and is addressed to the Mail Stop Assignment Recordation Services, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

May 21, 2003
Date of Deposit

Signature

Toni M. Sousa
Typed Name of Person Signing Certificate

PATENT ASSIGNMENT

WHEREAS, HELIX RESEARCH INSTITUTE, a corporation of Japan having a place of business at 1532-3, Yana, Kisarazu-shi, CHIBA 292-0812 Japan ("ASSIGNOR"), is the owner of the entire right, title and interest in and to United States patent application Serial No. 10/058,518, filed January 28, 2002("PATENT APPLICATION").

WHEREAS, CHUGAI SEIYAKU KABUSHIKI KAISHA, a corporation of Japan having a place of business at 5-1, Ukima 5-chome, Kita-ku, TOKYO 115-8543 Japan ("ASSIGNEE"), is desirous of obtaining the entire right, title and interest in and to the PATENT APPLICATION.

NOW, THEREFORE, in consideration of One dollar (\$1.00) and other good and valuable considerations paid by ASSIGNEE to ASSIGNOR, the receipt of which are hereby acknowledged, ASSIGNOR hereby sells, assigns and transfers to ASSIGNEE, its successors and assignees, the entire right, title and interest in and to the PATENT APPLICATION.

ASSIGNOR agrees for itself and its successors, legal representatives and assigns, without further compensation, to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the ASSIGNEE may reasonably request to effectuate fully this Assignment.

IN TESTIMONY WHEREOF, ASSIGNOR has caused this Assignment to be executed by its duly authorized officer.

HELIX RESEARCH INSTITUTE

By: Kenji Nagahari
Kenji Nagahari

Title: Liquidator

Date: November 11, 2002

ASSIGNEE hereby acknowledges receipt of the entire right, title and interest in and to the PATENT APPLICATION.

CHUGAI SEIYAKU KABUSHIKI KAISHA

By: Osamu Nagayama
Osamu Nagayama

Title: President and CEO

Date: Nov. 11 2002